

**COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Tidewater Regional Office**

STATEMENT OF LEGAL AND FACTUAL BASIS

GEO Specialty Chemicals Incorporated
Courtland, Virginia
Permit Number: TRO-61440

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, GEO Specialty Chemicals Incorporated has applied for a Title V Operating Permit for its Courtland facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:_____ Date:_____

Air Permit Manager:_____ Date:_____

Regional Deputy Director:_____ Date:_____

FACILITY INFORMATION

Permittee

GEO Specialty Chemicals Incorporated
3201 Enterprise Parkway
Suite 490
Cleveland, Ohio 44122

Facility

GEO Specialty Chemicals Incorporated
27047 Shady Brook Trail
Courtland, Virginia 23837

AFS ID No. 51-175-00058

SOURCE DESCRIPTION

SIC Code 2869 – Industrial Organic Chemicals, Not Elsewhere Classified.

The main manufacturing process at the facility is the Vulcup® process that produces various organic peroxides, blends of the peroxides, and support grades of the peroxides on solid substrate materials. The process involves several steps as described in the permit application, including information that qualifies as confidential business information (9 VAC 5-170-60 B).

This Title V permit is written to contain no confidential business information because the contents of a Title V permit cannot be kept confidential (CAA Amendment 1990, Section 503(e)). Hence, process description is minimal in the permit; instead, the emissions sources are primarily identified as 16 groups of equipment with common functions in the process flow, as seen below in the Emission Unit and Control Device Identification.

The facility is a Title V major source of volatile organic compounds. This source is located in an attainment area for all criteria pollutants. The facility was part of the Hercules Incorporated facility prior to May 2001. Title V permit application for the whole facility was received on 2/05/98, and deemed complete on the same day. In May 2001, Hercules Incorporated sold many of its assets to Eastman Chemical Resins Incorporated and GEO Specialty Chemicals Incorporated. The GEO's portion has never had an NSR permit. The Title V permit application for GEO was received on 2/04/02. The complete date of the permit application is still considered to be 2/05/98 because all the equipment was covered in the initial timely application by Hercules. Therefore, the facility still qualifies for the permit shield and CAM exemption. The permit application contains confidential business information (CBI) such as raw materials, method of production, process rates, equipment, and material compositions, that meets the confidential information criteria of 9 VAC 5-170-60 C and 40 CFR 2.208. Therefore, the application was processed accordingly to protect the CBI. Since the Title V permit has to be self-explanatory and suitable for public review, it is written to be practically enforceable without the inclusion of CBI. For example, the equipment description is very generic so that method of production is not revealed, and the size/rated capacity of equipment is not listed except when there are applicable requirements. For example, if a tank were subject to NSPS Subpart Kb requirements, the applicable storage capacity range in the Subpart would be provided.

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The following naming system was used to identify emission units, stacks/vents, and control equipment associated with the Vulcup® process. Two letters VC is for the Vulcup® process. A third letter “E”, “S”, or “C” denotes an emission unit or group of units, stack/vent, or control device, respectively. The next two numbers are essentially consecutive numbers used for each category to indicate a unit or a group of units with common function. For example VCE01 represents the emission group in the first step of the Vulcup® process. Each emission unit in the VCE01 group is identified by its own equipment ID number, for example, tank T-102. Stack/vents and control devices are always individual units, e.g. VCS01 and VCC05 are stack 01 and control device 05, respectively, hence, no further identification is necessary. Equipment to be operated consists of:

Emission Group/ Unit ID	Stack/ Vent ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
VCE01/ T-102	VCS01	Raw material storage/feed tanks: VOC storage tank, 1970	-	-	-	-	-
T-104	VCS02	VOC storage tank, 1970	-	-	-	-	-
T-108	VCS03	Caustic storage tank	-	-	-	-	-
T-300	VCS04	VOC feed tank, 1970	-	-	-	-	-
VCE02/ R-200	VCS05	Reactor Reactor, 1971	-	-	-	-	-
VCE03/ T-202	VCS06	Intermediate processing Intermediate tank, 1970	-	-	-	-	-
T-204	VCS08	Intermediate tank, 1970	-	-	-	-	-

Emission Group/ Unit ID	Stack/ Vent ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
T-312A	VCS09	Wastewater tank, 1970	-	-	-	-	-
VCE05/		Raw material storage/feed (solvents) tanks					
T-306	VCS11	VOC tank, 1970	-	-	-	-	-
T-100	VCS12	VOC tank, 1970	-	-	-	-	-
VCE06/		Intermediate processing					
T-206	VCS14	Process unit, 1970	-	-	-	-	-
T-208	VCS15	Intermediate tank, 1970	-	-	-	-	-
S-210	VCS16	Process unit, 1970	-	-	-	-	-
V-E-208	VCS16c	Process Condenser System, 1995, for recovery of solvents from vents VCS 04, 06, 08, 15, 16, and 16a	-	-	-	-	-
VCE06a/							
G-212	VCS16a	Process unit, 1970	-	-	-	-	-
C-401	VCS16b	Process unit, 1970	-	-	-	-	-
VCE07/							
T-302	VCS13	Solvent recovery VOC tank, 1970	-	-	-	-	-
T-304-5	VCS17	Batch still, recovery tank, 1970	-	-	-	-	-

Emission Group/ Unit ID	Stack/ Vent ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
VCE08/		Raw material storage/feed tanks					
T-112	VCS18	VOC storage tank, 1981	-	-	-	-	-
T-113	VCS19	VOC storage tank, 1981	-	-	-	-	-
T-314	VCS19a	VOC storage tank, 1970	-	-	-	-	-
T-406	VCS20	VOC storage tank, 1970	-	-	-	-	-
T-320	VCS21	VOC tank, 1970	-	-	-	-	-
T-308	VCS38	Blended Grade tank, 1970	-	-	-	-	-
T-301	VCS40	VOC tank, 1981	-	-	-	-	-
VCE09/		Reactors					
R-404	VCS22	Reactor, 1970	-	-	-	-	-
R-404A	VCS23	Reactor, 1970	-	-	-	-	-
VCE10/		Product processing					
T-410	VCS24	Process tank, 1970	-	-	-	-	-
T-402	VCS25	Caustic blend tank, closed top, 1974	-	-	-	-	-
T-312B	VCS26	Wastewater tank, 1994	-	-	-	-	-
VCE10a/		Recovery Process					
T-313	VCS27	Recovery tank, 1977	-	-	-	-	-

Emission Group/ Unit ID	Stack/ Vent ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
VCE11/		Evaporation					
T-412	VCS28	Feed tank, 1970	-	-	-	-	-
T-416	VCS29	Hotwell, 1993	-	-	-	-	-
T-303	VCS29a	Separator tank, 1979	-	-	-	-	-
T-305	VCS29b	Separator tank, 1970	-	-	-	-	-
VCE12/		Solvent Recovery					
T-318	VCS30	VOC feed tank, 1970	-	-	-	-	-
VCE13/		Product Storage tanks					
T-418A	VCS31	Vulcup R Product tank, 1970	-	-	-	-	-
T-418B	VCS32	Vulcup R Product tank, 1970	-	-	-	-	-
T-418C	VCS33	Vulcup R Product tank, 1979	-	-	-	-	-
T-418D	VCS34	Vulcup R/ D-16 Product tank, 1979	-	-	-	-	-
T-419	VCS35	Vulcup R/ D-16 Product tank, 1994	40 to <75 m3	-	-	-	-
VCE13a/		Product Blending Process					
T-101-1	VCS36	Blended grade tank, 1991	-	-	-	-	-
T-101-2	VCS37	Blended grade tank, 1991	-	-	-	-	-
T-504	VCS39	Blended grade tank, 1974	-	-	-	-	-

Emission Group/ Unit ID	Stack/ Vent ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
VCE14	VCS41	Packaging area	-	Baghouse fabric filters, 1971, 99+% control efficiency	VCC05	PM/PM-10	-

*The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

The above Table needs additional explanation. The ID numbers for emission groups (VCE01 to 14) and stacks/vents (VCS01 to 41) are mostly sequential. However, through several revisions by the facility to ensure accuracy, some of the numbers (e.g. VCE04, VCS07) had to be skipped because the item either does not exist or is combined with others. Please note that the Process Condenser System listed under VCE06 (VCS16c) is a solvent recovery system for vents in various emission groups; the recovered materials go to Tanks T-302 (VCS13) for reuse. The Table includes all emission units unless they are listed as Insignificant Emission Units. The equipment list is prepared as complete as possible because, given the complexity of the facility's process, the list would be useful in future determination of New Source Review permit requirements for a proposed modification or expansion at the facility. This is especially important as the facility is a PSD-size source (a chemical plant with VOC emissions >100 tons/year). The size/rated capacity of the equipment is confidential business information, hence, not listed unless it is necessary for indication of applicable requirements. For examples, if the tanks were subject to NSPS Subpart Kb requirements, the applicable storage capacity range in the Subpart would be provided. Note that the size range for tank T-419 (VCS35) is given as it would have been subject to the recordkeeping requirements of New Source Performance Standards 40 CFR 60 Subpart Kb if not for the new amendment of the rule on 10/15/03. As a result of the amendment, no tanks at the facility are subject to NSPS Subpart Kb (Please see also the discussion under Inapplicable Requirements section).

EMISSIONS INVENTORY

A copy of the 2002 annual emission statement is attached. Emissions are summarized in the following table. Note that the facility has no HAP emissions as it does not use any HAP containing raw materials (confirmed by a review of the MSDS of raw materials, and by facility's letter dated August 28, 2003) and no HAP production is anticipated from the process reactions.

2002 Actual Emissions

	2002 Criteria Pollutant Emission in Tons/Year				
Emission Unit	VOC	CO	SO ₂	PM ₁₀	NO _x
Vulcup® Process other than Solids Blending	150.5	NA	NA	NA	NA
Vulcup® Solids Blending	NA	NA	NA	0.01	NA
Total	150.5	NA	NA	0.01	NA

EMISSION UNIT APPLICABLE REQUIREMENTS -

Limitations

The facility does not have any NSR permit.

The requirements that apply to the source are the following provisions of the Commonwealth of Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution:

- 9 VAC 5 Chapter 40 Existing Stationary Sources
 - Part I. Special Provisions. This part applies to all existing sources for which emission standards are prescribed.
 - Part II. Emission Standards. The following articles in this part apply to the source:
 - Article 1: Visible Emissions and Fugitive Dust/Emissions (Rule 4-1)
 - Article 4: Emission Standards for General Process Operations (Rule 4-4)

The following Virginia Administrative Codes in the above articles in Chapter 40 Part II with specific emission requirements have been determined to be applicable to the packaging area of the Vulcup® process (VCE14, stack/vent No. VCS41):

- 9 VAC 5-40-80, Standard for visible emissions from existing stationary sources, and
- 9 VAC 5-40-260, Standard for particulate matter emissions from existing general process operations.

Conditions III.A.1 and 2: Particulate emissions from the packaging area shall be controlled by fabric filters, and shall not exceed the limit allowed by 9 VAC 5-40-260.

The allowable limit is determined by the equation:

$$E = 4.10P^{0.67}$$

Where:

E = emission rate in lb/hr

P = process weight rate in tons/hr

For example, if the process weight rate is 0.4 tons/hr, the allowable limit is:

$$E = 4.1 \times 0.40^{0.67} = 2.2 \text{ lbs/hr}$$

A review of AP-42 Section 11 for Mineral Products Industry was conducted to find emission factors for similar operations. It was found that the available emission factors for the handling and transfer of materials range from less than 0.1 lbs/ton (sand/aggregate transfer in concrete batching) to 3.0 lbs/ton (unloading and conveying raw materials in glass fiber manufacturing) for uncontrolled operations. Using the most conservative factor and assuming that the control efficiency of the fabric filter is 99.5%, the potential to emit at a process weight rate of 0.4 tons/hr

is:

$3.0 \text{ lbs/ton} \times 0.4 \text{ tons/hr} \times (100-99.5)\% = 0.006 \text{ lbs/hr}$ that is significantly lower than the allowable limit of 2.2 lbs/hr

The facility has also performed a material balance on the packaging step. It was found that, after adjusting for a process weight rate of 0.4 tons/hour, the material captured in the baghouse would be 10-17 lbs/hour on the average over the batch time, depending on the product type. Therefore, the actual emission rate can be estimated as:

$17 \text{ lbs/hr} \times [(100-99.5)\% / 99.5\%] = 0.085 \text{ lbs/hr}$ that is also significantly lower than the allowable limit of 2.2 lbs/hr

Therefore, compliance to the particulate emission limit is assured as long as the fabric filters are in proper operation. This is accomplished by complying with the following conditions in opacity limits, monitoring and recordkeeping.

Condition III.A.3: Visible emissions from the fabric filter exhaust shall not exceed twenty (20) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed sixty (60) percent opacity (9 VAC 5-40-80).

Monitoring and Recordkeeping

Condition III.B.1 and 2:

Periodic monitoring: To ensure proper operation of the particulate emission control device, the fabric filters shall be inspected every time the product to be packaged is changed, but the duration between inspections cannot be longer than 30 days. Fabric filter bags shall be replaced as necessary. The inspection results shall be recorded in an inspection log with the date, name of the inspector, name of product, and any necessary corrective action.

Periodic monitoring: The permittee will perform daily checking of visible emissions from the fabric filter exhaust. If visible emissions are observed, corrective action shall be taken to eliminate the visible emissions. If visible emissions continue, a VEE according to Method 9 (40 CFR 60, Appendix A) shall be immediately conducted on the stack for at least 6 minutes. If the VEE opacity average exceeds 10%, the permittee shall continue the Method 9 for one hour from initiation to determine compliance with the opacity limit. Results of observations and/or VEEs shall be recorded in the operation log.

Records of observations shall include the following:

- a. The name of the observer,
- b. Date and time of the observation,
- c. An indication of presence or absence of visible emissions,
- d. The color of the emissions,
- e. Whether the emissions are representative of normal operation,
- f. If emissions are not representative of normal operation, the cause of the abnormal emissions,
- g. The duration of any visible emission incident, and any corrective action to eliminate visible emissions.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A).

Recordkeeping: The permittee will keep records of the fabric filter inspections and the daily visible emissions checks. These records together with proper maintenance of the control equipment at all times, are deemed sufficient to ensure compliance with the particulate emission limit and the opacity limit.

Condition III.B.3:

Periodic monitoring and record keeping: According to 9 VAC 5-40-20E from 9 VAC 5 Chapter 40, Part I-Special Provisions, to ensure compliance with respect to air pollution control equipment, the permittee is required to carry out and keep records of maintenance and operator training, keep an inventory of spare parts, and have available written operating procedures.

Condition III.B.4:

Recordkeeping: The facility shall keep records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The records shall be available on site for inspection and shall be current for the most recent five years. The records shall include, at a minimum, the monitoring records as required in Conditions III.B.1 and 2 above, the maintenance records, training records, inventory of spare parts, and operating procedures as required in Condition III.B.3 above, and all information (such as emission factors, calculation methods) needed to calculate annual actual emissions for the facility's annual Emission Statement report as required in Condition III.D.1. Given the complexity of the facility's process, the annual actual emission calculation records are useful in future determination of New Source Review permit requirements for any proposed modification or expansion at the facility.

Testing

Beside the monitoring requirements specified above, the permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

Condition III.D.1: The facility is required to submit the annual Emission Statement no later than April 1 of each calendar year in accordance with the provisions of 9 VAC 5-20-121. This is an applicable requirements from the General Provisions (9 VAC 5 Chapter 20). It may be included under General Conditions VI.L. Duty to Submit Information, as a request for the Emission Statement is sent out every year to all Title V facilities. However, this requirement is separated out to make sure that records are kept for future reference as discussed above for Condition III.B.3.

There are no other applicable reporting requirements other than those required under general conditions.

Streamlined Requirements

This facility has no NSR permit; therefore, there are no streamlined requirements.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the “Department of Environmental Quality Agency Policy Statement No. 3-2001”.

This general condition cites the entire Article that follows.

- B.2 Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Operating Permits for Stationary Sources
- B.3 Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Operating Permits for Stationary Sources

This general condition cites the section that follows.

- B 9 VAC 5-80-80. Application
- B.3 9 VAC 5-80-80. Application
- B.4 9 VAC 5-80-80. Application
- B.5 9 VAC 5-80-80. Application
- B.4 9 VAC 5-80-140. Permit Shield
- B.2 9 VAC 5-80-150. Action on Permit Applications

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emissions reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

J. Permit Modification

This general condition cites the sections that follow:

9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources

9 VAC 5-80-190. Changes to Permits.

9 VAC 5-80-260. Enforcement.

9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources

9 VAC 5-80-1790. Applicability, Permits For Major Stationary Sources and Modifications

Locating in Prevention of Significant Deterioration Areas

9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications

Locating in Nonattainment Areas

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on General Condition F.

This general condition cites the sections that follow:

U.2.d. 9 VAC 5-20-180. Facility and Control Equipment Maintenance or
Malfunction

9 VAC 5-80-110. Permit Content

Y. Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains a citation from the Code of Federal Regulations that follow:
40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.

40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.

40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

This general condition cites the regulatory sections that follow:

9 VAC 5-60-70. Designated Emissions Standards

9 VAC 5-80-110. Permit Content

STATE ONLY APPLICABLE REQUIREMENTS

The following Virginia Administrative Codes have specific requirements only enforceable by the State and have been identified as applicable:

- 9 VAC 5-40-130 et seq. (Rule 4-2), and 9 VAC 5-50-130 et seq. (Rule 5-2): Emission standards for odor.

FUTURE APPLICABLE REQUIREMENTS

There are no future applicable requirements that can be determined at this time. The facility has identified that it will not be subject to the Miscellaneous Organic Chemical Manufacturing MACT (40 CFR 63 Subpart FFFF, proposed April 4, 2002, promulgated August 27, 2003) because it is not a major HAP source. In fact, it stated in a letter dated August 28, 2003 that does not use any HAP in its processes. This was confirmed by a review of the MSDS of raw materials used by the facility.

Also, the facility will not be subject to the New Source Performance Standard for Volatile Organic Compound Emissions From the Synthetic Organic Chemical Manufacturing Industry Wastewater (40 CFR 60 Subpart YYY, proposed September 12, 1994) because it does not produce any of the SOCMI chemicals listed in Table 1 of the proposed rule as primary products.

INAPPLICABLE REQUIREMENTS

The following NSPS or MACT requirements have been determined to be inapplicable to the facility with the given reason:

- New Source Performance Standard (NSPS) Requirements for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification commenced after July 23, 1984, in 40 CFR 60 Subpart Kb, as amended on October 15, 2003, does not apply to any the tanks at the facility in the Vulcup® Process because of their earlier installation dates and/or their smaller than the affected sizes (greater than or equal to 75 m³). Prior to the October 15, 2003 amendment of the rule that raises the lower limit of the affected sizes, tank T-419 in VCE13 (VCS35) was subject to the record keeping requirements of the rule because its size was within the range of 40 m³ to <75 m³.
- NSPS for VOC Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes in 40 CFR 60 Subpart III: The facility does not have any SOCMI Air Oxidation units that were constructed, modified, or reconstructed after October 21, 1983, and produce chemicals listed in 40 CFR 60.617 as a product, co-product, by-product, or intermediate.
- NSPS for VOC Emissions from SOCMI Distillation Operations in 40 CFR 60 Subpart NNN: The facility does not have any SOCMI distillation units (as defined in 40 CFR 60.661) that were constructed, modified, or reconstructed after December 20, 1983, and produce chemicals listed in 40 CFR 60.667 as a product, co-product, by-product, or intermediate. Specifically, the vent collection condenser system at the facility does not meet the definition of a distillation unit, and it is a batch operation that is exempt per 40 CFR 60.660 (c)(3).
- NSPS for VOC Emissions from SOCMI Reactor Processes in 40 CFR 60 Subpart RRR: The facility does not have any reactors that were constructed, modified, or reconstructed after June 29, 1990, and produce chemicals listed in 40 CFR 60.707 as a product, co-product, by-product, or intermediate. Furthermore, all facility's reactors are batch operations (as defined in 40 CFR 60.701) that are exempt per 40 CFR 60.700 (c)(1).
- NSPS for Equipment Leaks of VOC in the SOCMI in 40 CFR 60 Subpart VV: The facility does not produce any chemicals listed in 40 CFR 60.489 as intermediates or final products.
- Hazardous Organic NESHAP (HON) MACT in 40 CFR 63 Subparts F, G, H, and I: The facility does not meet the criteria of 40 CFR 63.100 (b)(1) to (3). It does not manufacture as a primary product any chemicals listed in 40 CFR 63.100 (b) (1), does not use as a reactant or manufacture as a product or co-product any chemicals listed in 40 CFR 63.100 (b) (2), and is not a major HAP source.
- Cooling Tower MACT in 40 CFR 63 Subpart Q: The facility has never used chromium-based water treatment chemicals in the cooling towers.

- Miscellaneous organic chemical manufacturing MACT in 40 CFR 63 Subpart FFFF: The facility is not a major source of HAP emissions.

The following provisions of the Commonwealth of Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution have been determined to be inapplicable to the facility with the given reason:

- Standards for volatile organic compounds for General Process Operations in 9 VAC 5-40-300. This section of 9 VAC 5 Chapter 40 Article 4, Emission Standards for General Process Operations (Rule 4-4) at existing stationary sources does not apply because the facility is not located in the subject areas of Northern Virginia or Richmond Emission Control Area as defined in 9 VAC 5-20-206.

- Emission Standards For Volatile Organic Compound Storage and Transfer Operations, 9 VAC 5-40-3410 et seq. (Rule 4-25) do not apply to the facility because the facility is located in Southampton County which is not a VOC control area (9 VAC 5-20-206).

- The startup, shut down, and malfunction opacity exclusion listed in 9 VAC 5-40-20 A 3 cannot be included in any Title V permit. This portion of the regulation is not part of the federally approved state implementation plan. The opacity standard applies to existing sources at all times including startup, shutdown, and malfunction. Opacity exceedances during malfunction can be affirmatively defended provided all requirements of the affirmative defense section of this permit are met. Opacity exceedances during startup and shut down will be reviewed with enforcement discretion using the requirements of 9 VAC 5-40-20 E, which state that "At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions."

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
V-321	Floor Drains Collection Tank	9 VAC 5-80-720 B 2	VOC	NA
V-310	Sodium Carbonate Tank	9 VAC 5-80-720 A 42	NA	NA
T-511	Tote Cleaning Vat	9 VAC 5-80-720 B 2	VOC	NA
T-512	Tote Cleaning Vat Water System	9 VAC 5-80-720 B 2	VOC	NA
T-611	Tote Cleaning Vat	9 VAC 5-80-720 B 2	VOC	NA
T-612	Tote Cleaning Vat Water System	9 VAC 5-80-720 B 2	VOC	NA
T-501	Support Grade Water System	9 VAC 5-80-720 B 1&2	PM/PM-10 & VOC	NA
T-507	Support Grade Water System	9 VAC 5-80-720 B 1&2	PM/PM-10 & VOC	NA
Unassigned	Sample melter for Support Grade Rework	9 VAC 5-80-720 B 1&2	PM/PM-10 & VOC	NA
Unassigned	Totes/Drums for Support Grade Packing	9 VAC 5-80-720 B 1&2	PM/PM-10 & VOC	NA
V-323	Hot Water System	9 VAC 5-80-720 B 1 to 4	All criteria pollutants	NA
Unassigned	Warehousing/Storage/Offices	9 VAC 5-80-720 A 5 and 9 VAC 5-80-720 B 1 to 4	All criteria pollutants	NA

¹The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels

9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

The facility's former owner submitted a list of proposed confidential business information dated February 3, 1998, and received on February 5, 1998. The DEQ concurred with the proposed list of information in a DEQ letter dated February 23, 1998. More recently, beginning on August 28, 2003, the facility included with each submittal a showing and certification of confidential information according to Virginia DEQ policy guidance dated August 1, 2003 to reaffirm that raw materials, method of production, and material composition are confidential business information. The Title V permit was written to be self-explanatory but without any confidential business information so that it is suitable for public review.

PUBLIC PARTICIPATION

The proposed permit will be placed on public notice in the Tidewater News from December 18, 2003 to January 17, 2004.